



Rutherford County, Tennessee

SUBDIVISION REGULATIONS

Adopted on August 12, 2013 • Effective October 1, 2013 • Amended through August 12, 2019

RUTHERFORD COUNTY REGIONAL PLANNING COMMISSION
One South Public Square, Room 200 Murfreesboro, Tennessee 37130
P: 615.898.7730

Table of Contents

| | |
|--|----|
| Article I General Provisions..... | 1 |
| A. Title | 1 |
| B. Purpose..... | 1 |
| C. Authority..... | 1 |
| D. Jurisdiction..... | 2 |
| E. Interpretation | 2 |
| F. Severability | 2 |
| G. Amendments | 3 |
| H. Waivers..... | 3 |
| Article II Procedure for Subdivision Plat Approval | 5 |
| A. General | 5 |
| B. Classification of Subdivisions..... | 5 |
| C. Review Procedures | 6 |
| D. Official Submittal Date | 6 |
| E. Planning Commission Action | 7 |
| F. Pre-Application Conference | 9 |
| G. Preliminary Plan | 10 |
| H. Construction Plans..... | 12 |
| I. Final Plat | 15 |
| J. Miscellaneous Platting Situations | 19 |
| K. GIS Submittal | 20 |
| Article III Minimum Design Standards..... | 21 |
| A. General Requirements | 21 |
| B. Subdivision and Street Names..... | 21 |
| C. Conformity of Street Design and Alignment | 22 |
| D. Lots | 24 |
| E. Subsurface Sewage Disposal Systems (Septic Tanks)..... | 25 |
| F. Public Sewer or Decentralized Wastewater Treatment..... | 26 |
| G. Areas Subject to Periodic Flooding or Inundation | 26 |
| H. Stormwater Design..... | 27 |
| Article IV Assurance for Completion and Warranty of Improvements | 33 |

| | |
|---|----|
| A. Performance and Warranty Surety | 33 |
| B. Inspection of Improvements | 35 |
| C. Warranty Period and Certificate of Completion | 36 |
| D. Reduction, Extension, or Release of Performance Surety | 37 |
| E. Maintenance of Improvements..... | 37 |
| F. Expiration of Surety | 38 |
| G. Disposition of Liquidated Securities | 38 |
| Article V Enforcement and Penalties Violations | 39 |
| A. Enforcement | 39 |
| B. Penalties | 40 |
| Appendix A Certifications | 42 |
| Appendix B Roadway Design Specifications..... | 43 |
| Appendix C Definitions and Abbreviations | 56 |

Article I General Provisions

A. Title

These regulations shall hereinafter be known and cited as the Subdivision Regulations of Rutherford County, Tennessee.

B. Purpose

It is hereby declared to be the policy of the Rutherford County Regional Planning Commission (hereinafter referred to as Planning Commission) to consider the subdivision of land and development of subdivision plats as outlined in the Comprehensive Plan of the County for orderly planned and efficient physical and economic development.

These regulations are intended to “provide for the harmonious development of the region and its environs; for the coordination of roads within the subdivided land with other existing or planned roads or with the state or regional plan or with the plans of municipalities in or near the region; for adequate open spaces for traffic, light, air, and recreation; for the conservation of or production of adequate transportation, water, drainage and sanitary facilities; for the avoidance of population congestion; and for the avoidance of such scattered or premature subdivision of land as would involve danger or injury to health, safety or prosperity.” (T.C.A. §13-3-403)

These regulations herein shall supplement and facilitate the enforcement of the provisions and standards contained in the Zoning Ordinance of Rutherford County, Tennessee (hereinafter referred to as Zoning Ordinance) and are to be supplemented by the Rutherford County Stormwater Management Ordinance

C. Authority

These subdivision regulations are adopted by the Planning Commission in pursuance of the authority and powers granted by T.C.A. §13-3-401 through 13-3-412. The Planning Commission has fulfilled the requirements set forth in these statutes as prerequisite to the adoption of such regulations, having filed a certified copy of the most recent Long Range Transportation Plan of Rutherford County (hereinafter referred to as LRTP) at the Office of the Register of Rutherford County, Tennessee and having held public hearing as required by Article I.G.1. of these regulations.

D. Jurisdiction

These regulations shall govern all subdivision of land within the Rutherford County Planning Region as established by resolution of Tennessee State Planning Commission August 3, 1961. For these regulations the term “subdivision” means “the division of a tract or parcel of land into two (2) or more lots, sites, or other divisions requiring new street or utility construction or any division of less than five (5) acres for the purpose, whether immediate or future, of sale or building development, and includes resubdivision and, when appropriate to the context, relates to the process of resubdividing or to the land or area subdivided.” “Utility construction” does not include the mere extension of individual service pipes or lines for the purpose of directly connecting a single lot, site or other division to existing utility mains. (T.C.A. §13-3-401B.i. and 13-3-401B.ii.)

Any owner of land within this area wishing to subdivide said land shall submit to the Planning Department prescribed documents and plans according to the procedures outlined in Article II, conforming to the minimum requirements set forth in Article III. Any improvements shall be installed as required by Article IV of these regulations.

No land shall be subdivided within the jurisdiction until the applicant submits the document(s) required by these regulations, obtains Planning Commission approval of the final plat, and files the approved plat with the County Register.

E. Interpretation

These regulations shall be held to be the minimum requirements for the promotion of the health, safety, and general welfare of persons within Rutherford County. Where any provision of these regulations imposes restrictions different from those imposed by any other ordinance, rule, or regulation of law, whichever provision(s) are more restrictive or impose higher standards shall govern. Where any private provision exceeds the standards set forth herein, such shall be considered a private contract between the parties of interest and such is beyond the jurisdiction of the Planning Commission.

F. Severability

If any section, clause, paragraph, provision, or a portion of these subdivision regulations shall be found invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, clause, paragraph, provision, or portion of these regulations and their application and validity to other sections. The Planning Commission hereby declares that it would have enacted the remainder of these regulations even without any such part, provision, or application.

G. Amendments

1. Enactment. Before the addition of any amendment to these regulations, a public hearing shall be held by the Planning Commission. Notice of the time and place of the public hearing shall be given by publication in a newspaper of general circulation in the jurisdiction (T.C.A. §13-3-403c).
2. Codifications and Distribution. Subsequent to the adoption of any amendment to these regulations, such amendment shall be incorporated with placement pages incorporating the new or changed language. Each new or replacement page shall have an amendment number and shall be dated so as to indicate the date of the last revision of the page. Any necessary corrections to the Table of Contents, cross references, or numbering of sections of these regulations, but not specifically called out at the time of adoption, shall not require formal action by the Planning Commission.

H. Waivers

1. Findings. If the Planning Commission finds that compliance with certain subdivision regulations will increase the difficulty of development of a particular property without significant benefit (result in practical difficulties), a waiver of these regulations may be granted provided that such waiver shall not have the effect of nullifying the intent and purpose of these regulations. The Planning Commission shall make written findings based on the evidence presented to it in each specific case that;
 - a. The granting of a waiver shall not be detrimental to the public health, safety, welfare, or injurious to other property or improvements where the property is located.
 - b. The waiver must, in the judgment of the Planning Commission, be harmonious and consistent with the general purpose of these subdivision regulations notwithstanding the fact that certain aspects of these regulations may be waived as applied to the particular property and are not applicable generally to other property.
 - c. Because the particular physical surroundings, shape, or topographic conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out.
 - d. The waiver shall be consistent with the provisions of the adopted Comprehensive Plan, the LRTP and the Zoning Ordinance.

- e. An alternative providing equal or greater compliance is not available.

2. Procedures

A petition for a waiver shall be submitted in writing by the applicant along with the filing of the plat if required by the Planning Director. The petition shall state fully the grounds for the application and all the facts upon which the petitioner is relying.

3. Conditions

In approving waivers the Planning Commission may impose such conditions as in its judgment shall secure substantially the objectives, standards, and requirements of these regulations.

4. Record

Any waiver shall be stated in writing and in the minutes of the Planning Commission with the reason on which it is based.

Article II Procedure for Subdivision Plat Approval

A. General

Before any land is subdivided or any contract is executed for the sale of any parcel of land that is proposed to be subdivided and before any permit for the erection of any structure in a proposed subdivision is granted, the owner of the property or a designated attorney-in-fact (Hereinafter “applicant”), shall, upon payment of applicable fees, apply for and secure approval of proposed subdivision in accordance with the design standards as set forth in Article III and Appendix B of these regulations and in the Rutherford County Stormwater Management Ordinance (if applicable).

If an applicant is a corporation, LLC, or other similar organization, a contact person shall be identified on the application materials.

B. Classification of Subdivisions

Using the following definitions the Planning Director shall determine whether the application is a major subdivision, a minor subdivision, or a land partition.

1. Major Subdivision. A division of land into two (2) or more lots that includes any of the following;
 - a. A new or extended public street or street right-of-way, but not including future street alignments illustrated in a plan of re-subdivision.
 - b. Improvement(s) within an existing street right-of-way; other than (i) a repair or construction of sidewalk(s) or other pedestrian connections required by these regulations, (ii) fire hydrants or other types of minor improvements necessary to serve the lots being created.
 - c. The dedication of a right-of-way or easement for construction of any public utility, excluding private service lines, consistent with the adopted Rutherford County Long-Range Transportation Plan. This provision shall not include right-of-way dedications made for road prescriptive easements.
 - d. Dedications, reservations, improvements, or any other factors that, in the opinion of the Planning Director and/or County Engineer, with advice from reviewing agencies, require construction documents to be reviewed prior to final plat approval to ensure the public health, safety and welfare.

- e. Drainage easement and/or improvements common to one or more lots proposed that are either new or altered.
- 2. Minor Subdivision. A subdivision of land (including resubdivisions) where the conditions for major subdivision review, as set out in Article II.B.1. are not present.
- 3. Partition. A division of land, fronting an existing street and no new streets are proposed, creating not more than two (2) lots and not requiring public facilities or public utility extensions. Partitions that require a waiver from these regulations shall be deemed to be a minor or a major subdivision. Partition plat approval may be endorsed in writing on the plat by the Secretary of the Planning Commission or by his/her designee without the approval of the Planning Commission that the subdivision complies with such regulations.

C. Review Procedures

All applications for subdivisions shall follow the procedures described below;

- 1. Major Subdivision – (a) Pre-application conference with Planning and Engineering staff; (b) submittal of Preliminary Plan for Planning Commission approval; (c) submittal of Construction and Improvements Plans for staff; (d) submittal of Final Plat for Planning Commission approval.
- 2. Minor Subdivision – (a) Pre-application conference with Planning and Engineering staff; (b) submittal of Final Plat for Planning Commission approval.
- 3. Partition -- (a) Pre-application conference with Planning and Engineering staff; (b) submittal of Final Plat for staff approval.

D. Official Submittal Date

For the purpose of these regulations for major and minor subdivision, when a plat has been filed with appropriate officials, “the plat shall be placed on the agenda of the Planning Commission within thirty (30) days of the filing or the next regularly scheduled Planning Commission meeting after the thirty (30) day period. The applicant may waive the time frame requirement for the appearance for the plat on the agenda” (T.C.A. §13-3-404a).

E. Planning Commission Action

The Planning Commission “shall approve or disapprove the plat within sixty (60) days after the initial consideration of the plat by the Planning Commission meeting in a regularly scheduled session, unless at the end of the sixty (60) day period there is a holiday or unexpected interceding event that would close municipal or county government offices and thus affect the normal computation of the sixty (60) day period, in which case the plat shall be approved or disapproved after the interrupted sixty-day period at the next regularly scheduled meeting of the Regional Planning Commission; otherwise, the plat shall be deemed approved and a certificate to that effect shall be issued by the Commission on demand. The applicant for the Commission’s approval may waive the time requirement and consent to an extension or extensions of the applicable time period. When a plat has been filed with the appropriate officials of the Planning Commission, the plat shall be placed on the agenda of the Planning Commission within thirty (30) days of the filing or the next regularly scheduled Planning Commission meeting after the thirty (30) day period. The applicant may waive the time frame requirement for the appearance of the plat on the agenda. The ground of disapproval of any plat shall be stated upon the records of the Commission. Any plat submitted to the Commission shall contain the name and address of a person to whom notice of hearing may be sent; and no plat shall be acted upon by the Commission without affording a hearing thereon, notice of the time and place of which shall be sent by mail to the address not less than five (5) days before the date fixed for such hearing” (T.C.A. §13-3-404a).

1. Thirty Days to Submit Revised Plans. Any application that receives conditional approval from the Planning Commission shall be followed, within thirty (30) days, by submission of revised plans, or the Commission’s approval shall expire.
2. Effective Period of Preliminary Plan and Construction Drawings Approval.
 - a. Preliminary Plans would expire after two (2) years from the date of Planning Commission approval unless an extension is granted consistent with b. below or one of the following occurs:
 - i. A notice to proceed has been issued by the County Engineering Office and construction activity consistent with the approved Construction Drawings has occurred within the last three (3) months; or
 - ii. A final plat based on the approved preliminary plan is recorded.

- b. A one-time extension for one (1) additional year may be requested to the Planning Commission prior to the two (2) year expiration from the original date of approval. The Planning Commission may grant such extension if deemed appropriate based upon progress made in developing the subdivision. If an extension is granted, expiration will be determined based on 2.a. of this Section.
 - c. On all expired preliminary plans, any Construction Drawings or unrecorded final plats based upon such plan, will also be considered to be expired.
- 3. Revisions to Approved Preliminary Plans. Minor revisions shall be approved by the Planning Director if revisions are deemed not to be significant. For all revisions determined to be major, Planning Commission approval will be required. Procedures for considering a major revision to a preliminary plan shall be the same as required for an initial application for preliminary plan approval. Major revisions include, but are not limited to:
 - a. Change in location and number of access points
 - b. Increase in total number of lots
 - c. Reduction in size of lots
 - d. Change in size and/or use of open space
 - e. Significant changes to lot configuration or road locations/alignments
 - f. Environmental or other natural features' buffers and/or factors discussed during the pre-application conference
- 4. Expiration of Final Subdivision Plat. An approved final subdivision plat shall expire if it is not recorded with the Register of Deeds within one year after the date of approval for major subdivisions and within sixty (60) days for minor plats and partitions.
- 5. Vested Rights. No vested rights shall accrue to any plat by reason of preliminary plan or final plat approval until the actual signing of the final plat by the secretary of the Planning Commission and the recording of that plat with the Register of Deeds. Furthermore, approval of Preliminary Plan does not give the development vested rights to design regulations at the time of Preliminary Plan approval. When Construction Drawings are submitted for County approval they must comply with the regulations in effect at the time they are submitted regardless of Preliminary Plan approval date.

F. Pre-Application Conference

1. Prior to submitting plans for subdivision of property in Rutherford County, a developer shall request a pre-application conference with the Planning Director and County Engineer to review the location, scope, and nature of the proposed development; to clarify development issues; and to discuss other matters as may be relevant to the development review and approval process. This pre-application conference shall be attended by County staff as needed and the developer(s). A pre-application conference shall not be required where staff determines that no purpose will be served by having such a pre-application conference.
2. The purpose of the pre-application conference is to provide an opportunity for an informal exchange of information and ideas between the developer and the development team and the staff and to identify parties responsible for various tasks involving the development design. The conference is intended to introduce the developer and the team to the county's development process, to identify timeframes for submittal and review, and, if applicable, zoning changes or waivers from these regulations. It is expected that during the pre-application conference the following topics may be discussed including but not limited to:
 - LRTP
 - The possible need for traffic studies, as set forth in the Zoning Ordinance or determined by the County Engineer
 - The flood insurance program
 - Utility availability and capacity (particularly the availability and capacity of potable water; sanitary sewer methods)
 - Policies and expectations for off-site street improvements, drainage improvements, and traffic improvements
 - Other items as required by the Rutherford County Stormwater Management Ordinance.

Applicant shall provide an exhibit showing property configuration and acreage, as well as aerial photography showing surrounding conditions within one thousand (1,000) feet.

G. Preliminary Plan

1. The applicant shall submit to the Planning and Engineering Department, in accordance with the time schedule and copy requirements (hard copies and/or digital) established by the department, a preliminary plan of the proposed subdivision, drawn to a scale of not less than one (1) inch equals one hundred (100) feet, or at a scale that best represents the proposed development at the discretion of the Planning Director or the County Engineer, and any other plans or supporting documents/reports/studies that may be required by the Planning Commission, along with the payment of all required fees. The applicant shall submit copies of the revised plan, in accordance with the time schedule and copy requirements (hard copies and/or digital) established by the department. The Planning Director may at his/her discretion grant an extension to the above-described deadline for any preliminary plan submitted.
2. The Preliminary Plan shall include all phases of the entire development under consideration and meet the minimum standards of design as set forth in Article III and the general requirements for the construction of public improvements as set forth in Article IV and Appendix B and shall provide the following information insofar as it is possible:
 - a. Items to be shown on the preliminary plan
 - i. Proposed subdivision name
 - ii. Location, name and address(es) of the owner(s), name and address of the designer of the plan, along with professional registration and contact information
 - iii. Date, approximate north point on Tennessee State Plane, graphic scale, and location map
 - iv. Location of existing property lines, streets, buildings, water courses, railroads, sewers, bridges, culverts, streams, and any public utility easements or lines
 - v. Names of adjoining property owners, subdivisions and streets with corresponding property map and parcel number(s), deed book and page references for all existing easements and property zoning
 - vi. Current zoning
 - vii. Plans for proposed public utility layouts (sewers, water) showing feasible connections to the existing utility systems

- viii. Proposed property lines, locations, widths and names of proposed streets, alleys, drainage easements, utility easements, parks and other open spaces, reservations, water quality buffers, outlines and other building setback lines
- ix. Lots labeled in numerical sequence. Lot 1 shall be located in the first section/phase of the proposed development
- x. Contours of vertical intervals not more than two (2) feet except when specifically not required by the Planning and Engineering Staff
- xi. Acreage of land to be subdivided and Bearings and dimensions of overall property boundary
- xii. FEMA panel number showing 100-year flood limit, including floodway, with that portion of the property lying below the 100-year flood elevation being shown shaded or hatched
- xiii. Limitations for development such as sinkholes, rock outcrops, wetlands, topographic depressions, excessive slopes, jurisdictional waters of the state, etc.
- xiv. Existing significant trees and tree masses to be preserved
- xv. Name and location of any cemetery on the property and/or easements to any off-site cemetery through the property
- xvi. Proposed phasing
- b. Other supporting documentation to be included with preliminary plan submittal
 - i. If on-site sanitary methods are proposed (i.e. septic tanks, alternate systems): 100' Water Pollution Control map, as defined by the Tennessee Department of Environment and Conservation, for proposed areas
 - ii. Street name determinations from Emergency Communications E911 showing approved street names

- iii. Applicable deed of ownership for the property under consideration
- iv. Location map showing relationship of subdivision site to area
- v. Letter of water services availability providing domestic and fire demands for proposed subdivision
- vi. Letter certifying availability of electric power
- vii. Proposed overall drainage and stormwater concept plan with any on-site or off-site stormwater elements
- viii. Supporting information as identified in pre-application conference, including but not limited to traffic studies
- ix. The developer shall furnish the Planning Commission a consent for drainage certificate from adjoining property owners or any other property owners that will be affected by runoff as determined by the County Engineer when the post-development rate of runoff exceeds the pre-development rate of runoff or when the pattern of the natural drainage system is altered.

H. Construction Plans

Construction plans shall be submitted to the County Engineer's office for review of all required construction of streets, drainage systems, and public utilities. Such construction plans shall conform to the Preliminary Plan as approved by the Planning Commission. Construction plans shall be designed in accordance with requirements and specifications outlined in these regulations and per the Rutherford County Stormwater Management Ordinance.

Prior to beginning construction of each section/phase, construction plans shall be submitted and approved by the County Engineer, design engineer, and a Pre-Construction Conference held between the development team and County Engineering Staff.

All construction plans and supporting documents shall be stamped by a professional engineer registered in the State of Tennessee.

All Construction Plans shall contain the following:

- 1. Title and Cover Sheet
 - a. Name of Development
 - b. Name and Address of Developer(s)
 - c. Name and Address of Engineer and/or Surveyor

- d. Professional Engineer's and Surveyor's Stamp and/or Signature
- e. Location Map
- 2. Details Sheets
 - a. Headwalls
 - b. Typical Road Sections
 - c. Typical Ditch Sections
 - d. Cross Drain Details
 - e. Erosion Control Structures
 - f. Any other structures or construction requirements of special details at the discretion of the County Engineer
- 3. Street Plan and Profile Sheet
 - a. Detail plans plotted on plan and profile sheets to a minimum scale of 1" (one inch) = 100' (one hundred feet) horizontal, and 1" (one inch) = 10' (ten feet) vertical.
 - b. Plan section including the street and right-of-way plotted to the proper scale with stationing shown, and matching that of the profile section as nearly as possible.
 - c. Typical roadway sections, as appropriate.
 - d. Where conventional roadway sections are used, the stabilization required for the roadside ditches, including the linear extent and type of stabilization required.
 - e. Profile section plotted to the same scale as identified above and including the proposed centerline finish grade profile, in addition to the existing centerline profile with roadside ditch profiles.
 - f. All vertical control points on or pertaining to the proposed centerline profile such as P.V.C., P.V.I., and P.V.T.; all low points and street intersections as to station and elevation.
 - g. For all percent grades and for vertical curves design curves, refer to Appendix B.
 - h. Centerline finished grade elevations every 100' (one hundred feet), or cut sheets, to the nearest hundredth of a foot, at the bottom of the profile sheet.
 - i. Plan and profile sheets shall be signed and sealed by a registered engineer.
 - j. The proposed location of all traffic signs, warning signs, and regulation signs as required.

4. Grading, Drainage and Erosion and Sediment Control Plans

A complete plan of the proposed development of a scale no less than one inch equals one hundred feet (1"=100'), or at a scale that best represents the proposed development at the discretion of the County Engineer. This plan is to include the most current Datum available. A north arrow shall be shown on the plan. The source and date of the contour should be noted. Contours shall extend to the centerline of all roads bordering the site. Where drainage ultimately enters the groundwater via a sinkhole or drainage well, the drainage well, and the drainage area tributary to the sinkhole or drainage well shall be delineated.

Omission of any of the below requirements for detailed plans and calculations shall render the application incomplete, and it will be returned to the applicant, or his/her design engineer, for additional information. The following shall be included in this plan:

- a. All stormwater infrastructure related to lots shown on the submitted Construction Plan must be in place and approved by the Rutherford County Engineering Department before any lots shall be released.
- b. Any existing or proposed easements.
- c. Location of proposed basins showing direction of flow, taking into account offsite runoff being routed through or around the project.
- d. Existing buildings on the property.
- e. Existing and proposed drainage structures, including inlets, catch basins, junction boxes, drive pipes, culverts, cross drains, headwalls, and outlet facilities, with size, type, slope (top and sides), invert elevations, and quantity indicated.
- f. Hydrologic and hydraulic calculations for appropriate design conditions and facilities.
- g. Detention pond control structure details. All Detention/Retention Areas require an emergency overflow, unless approved by the County Engineer.
- h. Any proposed swale ditches, channel changes, or improvements, with typical section and length of change indicated. If invert elevations are not on the drawing, then depth, slope, and top and bottom width (if varies from typical), or elevations of slopes with flat bottom width.
- i. Any high water or flood lines, either calculated or observed in the vicinity of the proposed development, and the source of said line or elevation indicated.
- j. All fill areas indicated as such, with the limits and elevations indicated.

- k. At least one benchmark located, with the proper elevation indicated for each subdivision.
- l. The location and size of at least two (2) drainage structure immediately downstream of all stormwater discharge points from the proposed development including ditch cross-sections (unless County Engineer requires more). This may be shown on a vicinity map with a scale no less than 1" (one inch) = 2000' (two thousand feet).
- m. Drainage arrows indicating the existing and proposed direction of runoff throughout the development.
- n. Invert and top of grate elevations on all catch basins and inlets in addition to flow line elevations, stations, and percent grades of all cross drains and pipe between inlets and catch basins.
- o. Flood plain areas require the following information: existing and proposed flood plain and floodway boundaries along with flood plain elevations, and minimum pad and floor elevations for buildings in the flood plain.
- p. Temporary erosion and sediment control measures to be implemented during construction shall be shown on a separate sheet.
- q. Final stabilization measures proposed for all disturbed areas on the property. Areas with slopes 2:1 or greater shall be stabilized with rip rap, sod or by other methods approved by the County Engineer. Show stabilization for each ditch.
- r. Where special structures such as box culverts, bridges, or junction boxes are proposed, detail plans showing dimensions, reinforcement, spacing, cross-sections, elevations, and other pertinent information shall be submitted.
- s. Plans and engineering calculations shall be signed and sealed by a Tennessee registered engineer.
- t. After the pre-construction meeting and upon review and approval of the road and drainage plans by the County Engineer, the set of plans (total number of sets to be determined by the County Engineer on a case-by-case basis) will be stamped approved, signed, dated and issued by the County Engineer.
- u. The Planning Commission will consider no final plats for approval until the County Engineer has approved a set of construction plans.

I. Final Plat

1. The final plat shall conform to the preliminary plan and construction plans as approved; and, if desired by the applicant, it may constitute only that portion of the approved preliminary plan proposed for recording at the time, provided, however, that such portion conforms to all requirements and standards.
2. The applicant shall submit to the Planning and Engineering Department, in accordance with the time schedule and copy requirements (hard copies and/or digital) established by the department, a final plat, drawn to a scale that best represents the proposed development at the discretion of the Planning Director or the County Engineer, along with the payment of all required fees. The applicant shall submit copies of the revised plat, in accordance with the time schedule and copy requirements (hard copies and/or digital) established by the department. The Planning Director may at his/her discretion grant an extension to the above-described deadline for any final plat submitted. The approved final plat, on reproductive mylar and black ink, shall be recorded with the County Register of Deeds office where it will become the official plat of record. The applicant shall be responsible for paying all recording fees.
3. The final plat shall meet the minimum standards of design as set forth in Article III and IV and Appendix B (where applicable) and shall provide the following:
 - a. The lines of all streets and roads, existing buildings, alley lines, lot lines, building setback lines, lots numbered in sequential order, all easements and water quality buffers, and any areas to be dedicated to public use or sites for other than residential use with note stating their purpose and any limitations
 - b. Location of existing and proposed fire hydrants, or a statement that all lots will be within one thousand (1,000) feet of a fire hydrant
 - c. Acreage/square footage of all proposed parcels on the plat
 - d. Proposed public and/or private road names as approved by the Planning staff and Emergency Communications (E911)
 - e. Existing zoning(s) and setbacks chart with any exceptions graphically depicted on specific lots
 - f. Sufficient data to determine readily and reproduce on the ground the location, bearing and length of every street line, boundary line, block line and building line whether curved or straight, and including State Plane coordinates and north point. This shall include the radius, central angle and arc length distance for the curved streets right-of-way and the curved property lines that are not the boundary of curved streets
 - g. All dimensions to the nearest one hundredth (0.01) of a foot and angles to the nearest minute

- h. Location and description of monuments
- i. The names and locations of adjoining subdivisions and streets, existing easements, and the location and ownership of adjoining un-subdivided property; map, parcel, book, page
- j. Date, title, name and location of subdivision, graphic scale, and magnetic north point
- k. Location sketch map showing site in relation to area
- l. Lateral tie per subdivision to nearest intersection
- m. Area approved for subsurface disposal field construction and duplicate area shall be shaded and reserved for subsurface disposal system only. For each proposed lot, the square footage of this subsurface disposal area shall be broken down by types of soils (e.g. suitable and marginal soils) and shown on the plat.
- n. 100-year flood limit, including the floodway, as determined by most recently published FEMA maps on file with the Planning Commission, with that portion of the property lying below the 100-year flood elevation being shown shaded or hatched, along with minimum pad and floor elevations for impacted lots. Flood panel information shall also be shown.
- o. Driveway Culvert Size Chart, if required, approved by the **county** engineer, depicting each lot number with culvert sizes. Acceptable materials include CMP, RCP or other material as approved by the county engineer. No plastic materials will be allowed. Minimum size is fifteen (15) inches.
- p. All lots that have some geographic feature (i.e. sinkhole, flood plain, or drainage facilities) that would affect the location and construction of a structure/building, parking, accessory structures, or utilities (i.e. water, sewer, septic tank, well, electricity, phone) shall have a specific notation placed on the affected lot or in an appropriate location on the final plat that is readily visible. The applicant's engineer or surveyor shall denote any sinkholes, floodplains, drainage easements, etc., on each property.
- q. A plat note stating, "It is the responsibility of each builder to design and construct a suitable grading and drainage scheme which will convey surface water, without ponding in the lot or under the structure, from his/her structure to the drainage system constructed by the subdivision developer.

- r. If the Final Plat depicts a portion of the development that has common ownership, plans for improvements and maintenance of the common areas shall be presented to the Planning Commission for verification before recording of the Final Plat.
 - s. A plat note stating the recording Information of the articles of incorporation, bylaws and declaration of covenants and restrictions of the homeowners association if required.
 - t. A plat note stating the recording information of the Stormwater Maintenance Agreement if required.
 - u. Statement of purpose for the plat, shown as Note 1 or in a separate box.
 - v. Block showing time and date of recording along with plat book and page numbers
 - w. Critical Lots, as identified through Article III D.5. of these Regulations
 - x. Benchmark, with vertical datum, if required
 - y. The following note regarding improvements in drainage easements:

Repair or maintenance of any improvements (i.e. driveway, landscaping, utility lines, retaining walls, etc.) located in a drainage easement due to ditch and/or culvert maintenance/repair is the responsibility of the property owner.
 - z. Water quality buffer, if applicable
4. The following certificates shall be signed and shown on the final plat prior to the Planning Commission meeting in a reproducible fashion. If the provider does not require a signature, written confirmation shall be submitted to Planning and Engineering Staff and the appropriate certification may be excluded.
- a. Certificate of Ownership and Dedication, certifying that applicant is the landowner and dedicates streets, right-of-ways, and any sites for public use (See Appendix A).
 - b. Certificate of Accuracy, by registered professional surveyor certifying to accuracy of survey and plat and placement of monuments (See Appendix A).
 - c. Certificate of Approval for Recording, to be signed by the Secretary of the Planning Commission (See Appendix A).
 - d. Approval of water systems, using language provided by the water provider, certifying plat approval for water services, provided lines, valves, fire hydrants and fittings have been/shall be installed to specifications.

- e. Approval for electric power, using language provided by the electric provider, certifying power poles and other improvements have been/shall be installed in an acceptable manner and according to specifications.
 - f. One (1) of the following Certifications of General Approval of the Installation of a Solid Waste Disposal System using language provided by the solid waste authority:
 - i. Certification of General Approval for Installation of Subsurface Disposal System with Restrictions, certifying approved location by the Tennessee Department of Environment and Conservation, Division of Ground Water Protection.
 - ii. Certification of General Approval for the Installation of a Public Sanitary Sewer System, certifying that the appropriate agency has reviewed the project and it meets required regulatory standards.
 - iii. Certification of General Approval for the Installation of the Septic Tank Effluent Pumping (STEP) System, certifying that the appropriate agency has reviewed the project and it meets required regulatory standards.
 - g. If sanitary sewer is to be used, a certificate using language provided by the sewer provider.
5. The developer shall furnish the Planning Department a copy of the owner's deed and the final plat shall show deed book and page number where deed is recorded.
6. Drawn to a scale of 1" = 100', or at a scale that best represents the proposed development at the discretion of the Planning Director or the County Engineer, on a 12" x 18", 18" x 24" or 24" x 36" sheet (outside dimensions).

J. Miscellaneous Platting Situations

1. Consolidation Plat

Any number of existing lots of record may be combined into an equal or lesser number of lots by submittal of a final plat as described in this article. The final plat shall additionally show the original lot lines as dashed lines and the proposed lot lines as solid. Combining lots shall require approval by the Planning Director. Any lots resulting from such consolidation shall meet all applicable regulations. Consolidation plats that require a waiver from these regulations shall be deemed to be a minor or major subdivision, unless the Planning Director deems the new lot(s) configuration is

closer to compliance with these regulations and/or zoning regulations than the existing lot(s) configuration.

2. Condominium Plat

- a. Any public or private infrastructure, easement, dedications or other improvements/encumbrances shall be platted in accordance with the applicable sections and procedures of these regulations.
- b. The platting of individual condominium units in accordance with an approved Preliminary Plan, Site Plan, PUD Master Plan, or other document shall be in accordance with the Tennessee Condominium Act of 2008 rules and requirements, (T.C.A. §66-27-309).

K. GIS Submittal

All plans and plats submitted for consideration under these regulations must have a minimum of four points which shall form a closed polygon that encompasses the entire project submitted. Additional points which permit definition of sub-polygons within the project will be acceptable and desirable. These points must be defined in terms of the following geographic coordinate system: Decimal fractions of a degree Tennessee State Plane Coordinates. The coordinate system selected must maintain a minimum precision corresponding to the following standards for each individual coordinate type for both X and Y coordinates:

Tennessee State Plane: each coordinate pair must be defined to the nearest tenth of a foot; for example, a coordinate of "(525.042.7, 1,826,294.1)". These coordinates may be presented in a tabular format on the plat similar to curve data tables.

Upon resubmittal during review process, prior to final approval, in addition to the paper copies required, DWG and PDF files shall be submitted in a recordable media format or emailed to a designated representative of the Planning and Engineering Department. The purpose of this requirement is to facilitate the input of new development plats into the Planning Commission's computerized Geographic Information System for analysis, storage and retrieval.

Article III Minimum Design Standards

A. General Requirements

1. In addition to the requirements established herein, divisions of land and improvements constructed thereupon shall comply with all applicable laws, ordinances, resolutions, rules, or regulations, including, but not limited to the following:
 - a. All applicable provisions of Tennessee law, regulations or policy;
 - b. The Zoning Ordinance, International Building Code and applicable laws of Rutherford County;
 - c. The Rutherford County LRTP;
 - d. The Tennessee Department of Environment and Conservation;
 - e. The rules of the Tennessee Department of Transportation (if the subdivision or any lot contained herein abuts or encompasses an existing or proposed state highway or state route);
 - f. The standards and regulations adopted by other boards, commissions, and agencies of Rutherford County, where applicable.
2. These design standards shall be considered minimum requirements and may be increased at the direction of the County Engineer in order to address conditions that may be unique to a particular site. Any on-site or off-site engineering improvements shall be in accordance with these regulations and the Rutherford County Stormwater Management Ordinance. Design of streets shall follow the latest editions of these subdivision regulations, the TDOT "Roadway Design Guidelines" and the AASHTO "A Policy on Geometric Design and Highways and Streets" unless otherwise noted. Also, other relevant TDOT, AASHTO, FHWA and ITE design documents should be consulted for guidance. The County Engineer shall make the final decision if any questions or conflicts arise between any of the standards.

B. Subdivision and Street Names

The developer shall provide names for consideration by the Planning Staff, Rutherford County Emergency Communications District and Planning Commission for all new streets within the subdivision proposed to be developed at the time of preliminary plan review.

The applicant may, if so desired, submit road names at preliminary plan submittal. The proposed name of a subdivision or street within the subdivision shall not duplicate or closely approximate phonetically the name of any other subdivision or street within Rutherford County. The Planning Commission shall have final authority over street names. Proposed streets that are obviously in alignment with others already existing and named should bear the names of existing streets.

C. Conformity of Street Design and Alignment

1. All proposed streets and roads shown on a Major Subdivision shall conform to the width and location requirements as set forth by the LRTP of Rutherford County and/or these Subdivision Regulations (See Appendix B).
2. Relation to Adjoining Street System - The proposed street system shall extend existing streets where feasible. They shall be extended at a width no less than the required minimum width as established by the LRTP or in these Subdivision Regulations.
3. Street Right of Way Widths – The minimum width of right-of-way shall be as shown in the LRTP or in these Subdivision Regulations.
 - a. The entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing street.
 - b. When the subdivision is located on only one side of an existing street, one-half ($\frac{1}{2}$) of the required right-of-way measured from the centerline of the existing roadway, shall be provided.
4. Restriction of Access – When a tract fronts on a collector, arterial or highway as specified in the LRTP, the Planning Commission may require that such lots have their access provided from a marginal access street or from adjacent streets with internal access.
5. Dead End Streets
 - a. Cul-de-sac streets may be planned where conditions permit their use, and in no instance have a length greater than sixteen hundred (1,600) feet.

- b. The Planning Commission may require the developer to provide public street access to adjoining properties where feasible. Proposed streets shall be extended by dedication to the boundary of such property. Such dead-end streets, when their length exceeds one hundred fifty (150) feet, shall provide a turnaround having the right-of-way diameter of at least one hundred (100) feet and built as specified in these Subdivision Regulations.

6. Private Streets

- a. Private Streets – There shall be no private street platted in any major subdivision unless approved within a Planned Unit Development (PUD). Every lot in subdivided property shall be served from a publicly dedicated street with the following exceptions:
 - i. Any private street/road easement that is a minimum of fifty (50) feet wide shall be allowed to have one (1) tract of land a minimum of five (5) acres in size divided off of it without having to comply with the Subdivision Regulations. There can only be one (1) tract accessing the private street/road easement.
 - ii. A minor subdivision on a private street/road easement provided that all of the following criteria are met:
 - (A) There are no more than three (3) lots involved;
 - (B) All of the proposed lots are greater than five (5) acres;
 - (C) The private easement must be fifty (50) feet wide; and
 - (D) The developer shall establish a Homeowners Association to provide for the perpetual maintenance of the private street/road easement.
- b. The subdivision of more than three (3) lots off of an existing or new private street/road easement must be indicated as such on the approved PUD regulating pattern book.
 - i. The private street shall be identified on the face of the plat as an easement for lot access and as a public utility easement.
 - ii. Within PUDs, private streets shall conform to these Subdivision Regulations.
- c. All vehicular access to the private street shall be shown on the preliminary plan and final plat.
- d. The Master Deed or declaration of covenants for the PUD shall comply with the Zoning Ordinance. The Master Deed or declaration of covenants shall contain in its description of the common element(s), a specific designation of the private

street as the responsibility of the Homeowners Association and not of Rutherford County. The Master Deed, or declaration of covenants, shall also provide for a sufficient level of funding to offset the reasonable and foreseeable costs of maintaining the private street.

- e. There shall be no reserve strips controlling access to streets, except where the control of such strips is definitely placed with the county under conditions approved by the Planning Commission.

D. Lots

1. Adequate Building Sites

- a. Each lot intended for building improvements shall contain an area outside the limits of any existing easement or building setback lines required in the Zoning Ordinance. This does not apply to common open space lots with no structure(s).
- b. Corner lots shall have extra width sufficient to permit the additional side yard requirements of the Zoning Ordinance or building setback lines outlined above.
- c. All lots that have some geographic feature (i.e. sinkhole, floodplain, or drainage easements) that would affect the location and construction of a structure/building, parking, accessory structures, or utilities (i.e. water, sewer, septic tank, well, electricity, phone) shall have a specific notation placed on the affected lot or in an appropriate location on the final plat by the applicant's engineer or surveyor that is readily visible.

2. Arrangement

- a. Insofar as practical, side lot lines shall be right angles to straight street lines or radial to curved street lines.
- b. Each lot must front upon a public street or road, except as permitted under these regulations..

3. Stormwater Management Facilities

- a. All retention or detention ponds shall not be on a residential building lot. Ponds must be on a numbered lot labeled as "Stormwater Detention Lot" or "Stormwater Retention Lot".

- b. All stormwater infrastructure must be located completely within a drainage easement. Minimum total easement width is twenty (20) feet. Easement width must be large enough to accommodate infrastructure and maintenance as approved by the County Engineer.
- c. Drainage Easements for all detention or retention facilities shall extend a minimum of twenty five (25) feet from the outer limits of the pond perimeter

4. Fire Protection

- a. The developer shall provide fire hydrants in all subdivisions.
- b. Fire hydrants shall be placed to ensure lots within all subdivisions are within a maximum of one thousand (1,000) feet of a hydrant with a note on the final plat stating fire hydrants shall be installed per the regulations of the water provider.

5. Critical Lots

Lots designated as critical based on soil conditions, degree of slope or other lot features, and to address concerns relation to the feasibility of construction as determined by the county engineer. Generally, a lot will be designated critical when the lot is created on an up-slope greater than 15% or a down or cross slope greater than 20%. A star symbol shall be used to identify critical lots on the face of both the preliminary and final plats.

Prior to application for a building permit on a lot designed as “critical,” a plan shall be submitted to the engineering department staff for approval. The plan shall provide a survey of existing conditions and details of the proposed development on the lot. Critical lots will not be released for construction of a structure until a critical lot planned is approved by the Engineering Department.

E. Subsurface Sewage Disposal Systems (Septic Tanks)

- 1. Subdivision lots proposed for building shall not contain septic system easements (Either primary or back-up soil sites) for the benefit of other parcels, tracts or lots.
- 2. Subdivision lots shall have adequate area for the installation of an approved septic system on site and shall not rely on an easement from adjoining property for sewage.
- 3. Proposed building sites shall meet the requirements of the State of Tennessee’s regulations to govern subsurface sewage disposal systems.

F. Public Sewer or Decentralized Wastewater Treatment

All public sewer or other on-site and decentralized wastewater treatment (i.e. Septic Tank Effluent Pump (STEP)) utilized in Rutherford County shall be owned and maintained by a jurisdictional water or sewer entity approved by the Planning Commission.

G. Areas Subject to Periodic Flooding or Inundation

Any tract of land with Federal Emergency Management Agency (FEMA) designated floodway and/or floodplain, or in an area known to be subject to periodic flooding or inundation as determined by the County Engineer, shall be subject to any applicable zoning provisions and the following:

1. Residential

- a. Minimum finished floor elevation which shall be set at three (3) feet above the established 100-year flood elevation or three (3) feet above the highest known water level in areas subject to periodic flooding or inundation.
- b. Minimum pad elevations shall be a minimum of one (1) foot above the established 100-year flood or a minimum of one (1) foot above the highest known water level in areas subject to periodic flooding or inundation. If a residential principal structure has a crawl space, the entire space must meet this requirement.
- c. Mechanical and electrical equipment shall be located one (1) foot above the 100-year flood elevation or one (1) foot above the highest known water level in areas subject to flooding or inundation.
- d. A ten (10)-foot wide yard surrounding the foot print of the house at or above the 100-year flood elevation or above the highest known water level in areas subject to periodic flooding or inundation in all directions from the principal structure.
- e. Fill material shall be placed in compacted layers four feet from the structure, and shall be continued out a minimum distance from the perimeter of any proposed building to the top of the slope a distance twice the depth of fill at that point. This shall be done at or above the 100-year flood elevation or if there is no 100-year flood elevation then at or above the best known flood elevation.
- f. The fill material specified in this section shall not have slopes steeper than 3:1 unless stabilization measures approved by the Rutherford County Building Codes Department. All slopes shall be stabilized.

2. Commercial, Industrial or other non-residential developments

- a. The minimum finished floor elevation which shall be set at one (1) foot above the established 100-year flood elevation or one (1) foot above the highest known water level in areas subject to periodic flooding or inundation.

H. Stormwater Design

All stormwater infrastructure and facilities must be located in the right-of-way or a drainage easement. These facilities and infrastructure if located outside of the right-of-way must be included in the Maintenance Agreement that is recorded with the Rutherford County Register of Deeds Office before the final plat is recorded. All developments must submit all quantity and quality drainage calculations and the Rutherford County Stormwater Calculation Summary before any Construction Plans will be reviewed.

The currently adopted Nashville Davidson County Metro Stormwater Management Manuals and regulations and/or the currently adopted TDOT Design Manuals shall be followed for design unless stated otherwise below:

1. Quantity Design Requirements

- a. The Rational Method may be used in designing runoff rates for areas up to fifty (50) acres. Developments with a drainage basin greater than fifty (50) acres must use another method approved by the County Engineer.
- b. The post-development rate of runoff for a development shall not exceed the pre-development runoff rate for the 2, 5, 10, 15, 25, and 50-year storm events.
- c. Direct Discharge into Waters of the State as defined by TDEC is only allowed if approved by the County Engineer.
- d. The design of the stormwater drainage system shall be based on a storm frequency of 25-year event. This criterion shall be applied to both open and closed conduit systems.
- e. Retention / Detention areas shall be designed with sufficient hydraulic capacity for a 50-year storm event. The emergency spillover must have the capacity for the 100-year storm event.
- f. Detention storage volume shall be drained within 72 hours for quantity calculations. Drawdown may be accomplished by a County Engineer approved outlet structure.
- g. All drainage systems shall be designed that when the receiving stream is at the 100-year storm event level, the storm sewer will continue to drain the areas they

are designed to serve.

- h. Discharge stormwater into the natural drainage-way by connecting the drainage-way at natural elevations, or by discharging the stormwater into an existing facility of sufficient capacity to receive it.
 - i. The design discharge at the outlet of drainage systems shall not result in velocities that equal or exceed the erosive velocity of the receiving channel, unless energy dissipation and erosion protection measures are placed at the outlet. Energy dissipation and erosion control devices shall have no overfall at the terminal end and shall discharge onto a stable section. The terminal section shall be considered stable if the terminal section design velocity is less than the erosive velocity.
 - j. All ditches and drainage swales shall be a minimum of eighteen (18) inches in depth, a 3:1 slope on all banks, and one-half percent (0.5%) minimum slope throughout the length of the ditch or swale.
 - k. Design Engineer must evaluate next two (2) downstream structures from development. If structures cannot handle post-construction flows then applicant must upgrade structures to handle new flows.
 - l. All bridges shall be designed for the 25-year storm event. The design flow shall consider runoff from the total tributary area and will require stream channel routing, as approved by the County Engineer.
 - m. Design must account for both off-site and on-site storm water drainage.
 - n. The maximum HW/D shall be equal to 1.2 for pipes greater than 24-inches and 1.5 for pipes 24-inches or smaller unless approved by the County Engineer.
2. Quality Design Requirements
- a. Development must meet all stormwater quality designs based on the currently adopted Rutherford County Stormwater Ordinance.
 - b. Developments must comply with all stream buffer widths set forth in the Rutherford County Stormwater Ordinance.
 - c. Developments must have a twenty-five (25) foot Water Quality Buffer on all sinkholes. This measurement is taken from the outer edge of a defined throat. If a sinkhole does not have a defined throat then a twenty-five (25) foot radius is taken from center of depression.
3. Sinkhole Drainage Design Requirements
- Because of the many drainage problems commonly associated with sinkholes and karst geology, the applicant must provide the following information prior to alteration of the natural drainage for watersheds discharging to such features.

- a. Sinkholes may not be utilized as part of the drainage system unless an overflow outlet is provided.
- b. Proposed onsite and offsite drainage channels that are tributary to a sinkhole throat or drainage well inlet shall be delineated, along with appropriate hydraulic calculations to define the existing and altered (if appropriate) 100 year flood plain and to confirm that offsite flooding will not be increased. Such drainage plans and hydraulic calculations are to be certified by a registered engineer.
- c. Detailed contours are to be shown for all sinkholes that are to receive stormwater runoff from the site. These contours are to have a maximum interval of two feet and are to be verified by field surveys.
- d. A geologic investigation of all sinkholes receiving stormwater runoff from the site shall be performed unless an overflow outlet is provided. The report from this investigation shall be certified by a registered engineer experienced in geology and groundwater hydrology or a registered geologist and shall contain the following:
 - i. Location and nature of underground aquifers.
 - ii. Direction of flow for the subsurface drainage associated with the sinkhole.
 - iii. Estimated safe discharge from sinkhole to aquifers. Include information on method of sinkhole discharge estimation.
 - iv. Potential for siltation problems
 - v. Foundation problems that may be expected around sinkhole.
 - vi. Details of drainage structures to be built around sinkholes.
 - vii. Any other factors relevant to the design of drainage from sinkholes.
 - viii. Plans showing the current and altered (if appropriate) 100-year flood plain.
 - ix. Compliance with any and all conditions that may be required by the federal government or the State of Tennessee shall be documented. The Tennessee Division of Ground Water is the primary regulatory agency for drainage wells. Drainage into a sinkhole may require a permit for a class V well under the rules for Underground Injection Control (UIC).

When sinkholes are utilized for drainage it must be assumed that the sinkhole is blocked. A surface outlet must be provided to prevent stormwater from rising above the 100-year flood elevation. No development will be allowed within the drainage basin of a sinkhole if such development will lead to any additional increase in flood levels within that or adjacent basins unless overflow outlet is provided. Special care will be required during construction to prevent eroded soil

and debris from being washed into the sinkhole.

4. Flood Plain Construction Requirements

In the development of plans for review by the Rutherford County Regional Planning Commission, it shall be the responsibility of the Applicant to include sufficient design information to enable evaluation of the environmental qualities of the affected area, the potential and predicted impacts of the proposed activity on affected waters, and the effectiveness and acceptability of the measures proposed by the Applicant for preventing or reducing adverse impacts.

5. Pre-development Site Information

- a. Location of existing streams and other flood water runoff channels, their normal channels, and the extent of the flood –plains at the established high water elevations, and the limits of the floodway at the scale of 1" = 100'.
- b. Location of existing lakes, ponds, swamps, and detention basins indicating their normal shorelines, flood plains and lines of inflow and outflow, at a scale of 1: = 100'.
- c. Location of existing farm drains, inlets, and outfalls, storm, sanitary and combined sewers and outfalls, septic tank systems and outlets, if any, and seeps, springs and flowing and other wells mapped at a scale of 1" = 100'.
- d. Location and description of nearby existing off-site water management facilities mapped at a scale of 1" = 100' such as wells, lakes, drainage ways, etc., which might be affected by the proposed construction of development.
- e. Floodways – Areas designed as floodways are located within areas of special flood hazard. The floodway is any extremely hazardous area because of the velocity of floodwaters, which can carry debris and potential projectiles and have erosion potential. Thus, the following provisions shall apply:
 - i. Encroachments, including fill, new construction, substantial improvements, and other developments, are prohibited unless certification (with supporting technical data) by a registered engineer is provided demonstrating that the encroachment shall not result in any increase in flood levels during occurrence of the base flood discharge.
 - ii. If item (i) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of these regulations.
 - iii. The open space uses listed below shall be permitted within the floodway to the extent that they are not prohibited in a particular area by any base zoning

ordinance and all applicable flood hazard reduction provisions of these regulations are met.

(A) Agricultural uses such as general farming, pasture, truck farming, forestry, sod farming, and wild crop harvesting.

(B) Public and private recreational uses not requiring “permanent or temporary structures” designed for human habitation; some examples are parks, swimming areas, golf courses, driving ranges, picnic grounds, wildlife and nature preserves, game and skeet ranges, and hunting, fishing, and hiking areas. Temporary structures are places on a site for less than 180 consecutive days and are not intended to be improved property.

(C) Utility facilities such as flowage areas, transmission lines, pipelines, water monitoring devices, roadways, and bridges.

f. Flood Plain Alterations. All flood plain alterations that result in the filling or elimination of flood plain storage shall provide compensating storage capacity by dredging out an equal amount of volume as occupied by fill. All dredge or cut materials shall be removed from the site before fill materials can be delivered, unless all fill material is generated onsite. A reasonable effort shall be made to preserve natural flow lines and to avoid situations that would encourage the deposition of sediment in slack water areas. All dredged or cut areas shall be stabilized immediately to prevent excessive erosion. Areas to be filled must be cleared of standing trees, stumps, brush, down timber and all objects including structures on and above ground surface. Topsoil shall be removed and stockpiled, while all other spoil materials must be disposed of offsite. Fill material obtained offsite shall not be stockpiled onsite before grading cuts are completed. Fill material shall be placed in compacted layers four feet from the perimeter of any proposed building to the top of the slope a distance twice the depth of fill at that point. The fill material must not have slopes less than 3:1 unless stabilization measures approved by the RCRPC are installed. All slopes shall be stabilized. No alterations can be made to flood plain land and drainage channels without the written approval of the County Engineer.

i. The construction of levee, earth fill, building, or other structure that alters a flood plain area shall only be permitted based on a plan prepared by a registered engineer, showing existing and proposed elevations, existing and proposed drainage channels, and existing and proposed structures. The plan shall be approved by the County Engineer certifying that the alteration and construction as proposed are in compliance with all flood hazard reduction provisions of these regulations.

ii. The proposed excavation, filling, or change of alignment of any existing channel under the jurisdiction of the U.S. Corps of Engineers shall be approved by the same.

- iii. The plan shall be approved by the Rutherford County Regional Planning Commission. Any duly approved alteration of the flood plain will be so noted on the official zoning map as a matter of information. This notation will be made upon certification by the Director of the RCRPC to the Planning Commission that such alteration has been completed in accordance with the approved plan.
- g. Flood proofing- Flood proofing measures such as those identified below are acceptable provided they are certified by a registered engineer or architect as being consistent with the base flood conditions for the particular area, and that flood proofing criteria for non-residential construction are met.
 - i. Anchorage to resist flotation and lateral movement.
 - ii. Installation of watertight doors, bulkheads, and shutters.
 - iii. Reinforcement of walls to resist water pressure.
 - iv. Use of paints, membranes, or mortars to reduce seepage of water through walls.
 - v. Addition of mass or weight to structures to resist flotation.
 - vi. Installation of pumps to lower water levels in structures.
 - vii. Construction of water supply and waste treatment systems to prevent the entrance of flood waters.
 - viii. Pumping facilities for subsurface drainage systems for buildings to relieve external foundation wall and basement floor pressures.
 - ix. Construction to resist rupture or collapse caused by water pressure or flotation debris.
 - x. Cutoff valve on sewer lines or the elimination of gravity flow basement drains.
- 6. It shall be the responsibility, of the project engineer to design and the developer to provide, a drainage system for the proposed development that will be capable of providing positive drainage away from all lots when they are properly graded.
- 7. It shall be the responsibility of the builder to provide proper drainage and grading for each lot to drain into the development's drainage system without adversely affecting any other lot or the development drainage system.

Article IV Assurance for Completion and Warranty of Improvements

A. Performance and Warranty Surety

1. Performance Surety. The applicant shall post a Performance Surety for all public improvements shown on Final Plat and Construction Plans associated with that phase or section being recorded. In addition any drainage structures associated with the construction of the recorded plat should be included in the Performance Surety. The County Engineer will set the Performance Surety amount as sufficient to secure the satisfactory construction, installation, and acceptance of the required improvements. Such performance surety shall comply with all statutory requirements and shall be satisfactory as to form, sufficiency, and manner of execution as set forth in these regulations. The Performance Surety shall remain in force until the improvements comply with the approved construction drawings as determined by the Planning and Engineering Department and all warranty periods are expired.
 - a. Performance Surety amount. The minimum amount of the Performance Surety shall be an amount equal to one-hundred and ten percent (110%) of the cost of installation of required improvements. The proposed amount of the cost of installation of required improvements shall be calculated and stamped by the developer's engineer and submitted to the County Engineer for approval. The proposed amount shall include a detailed itemized estimate of all items including incomplete items on the date the estimate is prepared.
2. Composition of Performance Surety. For the purpose of these regulations, Performance Surety shall consist of two (2) documents: a Performance Agreement provided by the County Engineer's office and an accompanying security document.
 - a. The Performance Agreement. The Performance Agreement shall stipulate the work to be performed by general categories and the estimated value or cost of each category. The Performance Agreement shall be entered into by owner or developer of the property, the lending institution, and Rutherford County but shall run with the land and likewise, jointly and severally, obligate subsequent owner(s) as stated in the Performance Agreement.
 - b. The Security Document. The security document may be in a form as follows and shall express the value in a total amount equaling the sum of all work categories:
 - i. Irrevocable Letter of Credit.
 - (A) Must be issued by or confirmed by a financial institution with a physical location in Tennessee.

- (B) The initial term of the letter of credit shall be for a minimum of two (2) years from date of the recording of the final plat and shall be renewed as detailed within the performance agreement until project completion.
- (C) All letters of credit shall include an automatic renewal clause that provides at least sixty (60) days advance notice to the County Engineer of any decision by the issuing financial institution not to extend the document's expiration date.
- (D) The Irrevocable Letter of Credit expiration date shall not fall on a weekend day or national bank holiday.
- (E) The following language (or substantially similar language, acceptable to the County) shall be included on all letters of credit accepted for subdivision or commercial building improvements by Rutherford County. The underlined areas shall be completed appropriately.

"We hereby issue this Irrevocable Standby Letter of Credit in your favor which is available at sight by drafts on (Name of Bank), bearing the clause "Drawn under Irrevocable Standby Letter of Credit Number _____", accompanied by:

Beneficiary's statement signed by one of its officials stating (Name of the owner or developer) has failed to complete certain improvements and/or has failed to obtain written authorizations for release from all affected agencies for the development project known as (Name of the project)."

- (F) The following statement shall be included on all letters of credit;

"The County may complete draws on this Letter of Credit by delivery via Registered or Certified mail, Federal Express or other similar courier service, or by facsimile to _____, or by electronic mail to the following address _____."

- (G) All letters of credit must include a statement detailing the improvements for which they were originally issued.
- (H) Should a security instrument expire, be voided or failed to be extended, it remains the owner's or developer's responsibility to replace the security instrument or complete the remaining outstanding work as identified by the approved construction plans.

- ii. Cashiers or Certified Check. Issued by a financial institution written to Rutherford County Government.

3. The Letter of Credit option shall not be available to an owner or developer, without Planning Commission approval, whose past performance has resulted in breached or expired bonds (Within two (2) years of time of breach).
4. A financial institution whose past performance has resulted in non-payment of a letter of credit may be excluded from providing a letter of credit for any owner or developer for a period of five (5) years from the date of breach as determined by the Rutherford County Regional Planning Commission.
5. Temporary Improvements. When applicable, the applicant shall build and pay for all costs of temporary improvements required by the Planning Commission and shall maintain such for the period specified by the Planning Commission. Prior to construction of any temporary facility or improvement, a performance surety shall be posted which shall insure that the temporary facilities shall be properly constructed, maintained, and removed.
6. Costs of Improvements. All required improvements shall be made by the applicant at the applicant's expense. Any provisions for reimbursement by the County or any utility district shall be by separate agreement with the applicable Rutherford County department or other government entity.
7. Governmental Agencies. Governmental agencies to which these sureties and contract provisions apply may file, in lieu of said contract or surety, a certified resolution, or ordinance from officers or agencies authorized to act in their behalf agreeing to comply with the provisions of this chapter.
8. Failure to Complete Improvements. In those cases in which a performance surety has been posted and required improvements have not been installed within the terms of such performance surety agreement, the Planning Director or County Engineer may declare the surety to be in default and require that all the improvements be installed regardless of the extent of the building development at the time the performance surety is declared to be in default. The funds of the performance surety shall be used to complete the improvements. The County may, in the pursuit of executing the committed improvements, exercise the right to file suit against all entities, jointly and severally, responsible for said obligations.

B. Inspection of Improvements

1. Inspection

The County Engineering Office shall be responsible for the roads and drainage inspection on all subdivisions within Rutherford County. Any questions regarding inspections or approvals shall be forwarded to the County Engineer's Office at One Public Square South, or call (615) 898-7732. On any critical phase of development 1) Beginning of the excavation, 2) Preparation of the subgrade, 3) First lift of the base material, 4) Second lift of the base material, and the 5) Surfacing. The County shall be notified 24 hours in advance.

2. If the Planning Director or County Engineer finds that any of the required improvements have not been constructed in accordance with the approved construction standards and specifications, the applicant shall be responsible for completing the improvements to the required standards. Whenever the cost of improvements is covered by a performance surety, the applicant and the bonding company or financial institution shall be liable severally and jointly for completing said improvements according to specifications.

3. One (1) year after the approved installation of the asphalt binder course or after 75% of the lots have a certificate of occupancy, whichever is sooner, all roads included on the Final Plat must be completed per the Rutherford County Roadway Design Specifications, located in Appendix B, to include final asphalt surface course.

4. Before building lots will be released, all drainage facilities must be installed per the Construction Plan. Also, all areas within limits of Final Plat, if no construction is being performed, must have final site stabilization. These areas must be inspected and approved by the Rutherford County Engineering Department.

5. As-Built drawings. All applicants are required to submit actual As-Built plans for any drainage structures located on site after final construction is complete. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered Professional Land Surveyor licensed to practice in the State of Tennessee. A final inspection and approval of submitted As-Built drawings by Rutherford County Engineering Department is required before any building permits and the Performance Bond will be released.

6. Protection of Site and Adjoining Sites. During the progress of the construction, the Contractor shall remove all debris, unused materials, and trash from the site before the construction is completed. He/She shall restore the site to a well-graded appearance. Trash, man-made materials, stumps, or other debris, unless approved by the County Engineer, shall not be left on site or buried on site.

C. Warranty Period and Certificate of Completion

After the final surface asphalt course is installed and all other improvements represented

on the Final Plat and Construction Plans are complete, the Engineer of Record shall submit a stamped Certification of Completion to the County Engineer. After a final inspection is completed by the County Engineer and all improvements have been in agreement with the Final Plat and Construction Plans, notification will be given to the developer of the beginning of a one (1) year minimum warranty period. The existing Performance Surety will remain in place during the warranty period to cover any warranty or maintenance issues that may arise.

D. Reduction, Extension, or Release of Performance Surety

1. Reduction of Performance Surety. After a written request from the developer, a performance surety may be reduced upon demonstration of satisfactory completion of public improvements, that includes installation of the asphalt surface binder course, and then only to the ratio that the installed improvement bears to the total public improvements for the subdivision. In no event shall a performance surety be reduced below fifty percent (50%). The initial surety reduction shall be considered only after the asphalt surface binder is applied to the entire subdivision phase as platted. There shall be no reduction or release of a surety if there are any outstanding administrative penalties or violations related to the bonded site.
2. Extension of Performance Sureties. The County Engineer may, upon proof of extenuating circumstances by the applicant, extend the completion date set forth in such surety by a period of time not to exceed six (6) months. One additional extension of a period of time not to exceed six (6) months may be approved by the Planning Commission, upon proof of extenuating circumstances shown by the applicant. At the time either of these two extensions is applied for, the County Engineer may modify the amount of the surety in order to cover the costs of the remaining improvements.
3. Release of Performance Surety. The Performance Surety shall not be released until the Certification of Completion from the Engineer of Record is approved by the County Engineer and acceptance of all infrastructure that is to be accepted within the right-of-way by the Rutherford County Road Board.
4. Defer to Planning Commission. The County Engineer, may at his/her discretion, defer decisions to reduce, extend or release a surety to the Planning Commission.

E. Maintenance of Improvements

The applicant shall be required to maintain all improvements including all lot improvements, until acceptance of such public improvements by the appropriate department.

F. Expiration of Surety

Should the surety lapse or expire for any reason prior to completion of all required improvements, no additional building permits shall be issued and any and all appropriate legal action necessary may be taken to assure completion of improvements. The surety may be declared in default and the security shall be held by Rutherford County. Only after completion of all improvements or posting of a new surety shall building permits again be issued.

G. Disposition of Liquidated Securities

Funds derived from liquidation of securities as a result of performance agreement default shall be used by the applicable Rutherford County Department or utility district to complete the required work. Project administration fees may be charged by the departments or utility district against liquidated funds to offset actual personnel or equipment costs utilized in the accomplishment of required work. Any surplus funds shall be returned to the security provider after all charges and expenses are paid and required work is accepted.

Article V Enforcement and Penalties Violations

The enforcement of these regulations and penalties for the unapproved recordation of transfer of land are provided by state law in the authority granted by public acts of the State of Tennessee.

A. Enforcement

1. No plat or plan or a subdivision of land into two or more lots located within the area of planning jurisdiction shall be admitted to the land records of the county or received or recorded by the County Register until said plat or plan has received final approval in writing by the Planning Commission as provided in T.C.A. §13-3-402.
2. No board, public officer, or authority shall accept any street, lay or authorize the layout of water mains of sewers, or the construction of other facilities or utilities in any street located within the area of planning jurisdiction unless such street shall have been accepted, opened or otherwise received the legal status of a public street prior to the adoption of these regulations, or unless such street corresponds in its location and lines to a street shown on a street plan made and adopted by the Planning Commission as provided in T.C.A. §13-3-406.
3. From and after the time when the platting jurisdiction of any Regional Planning Commission has attached as provided in T.C.A. §13-3-402, no building permit shall be issued and no building shall be erected on any lot within the region, unless one (1) of the following three (3) criteria is met:
 - a. The street giving access to the lot upon which the building is proposed to be placed has been accepted or opened as, or shall have otherwise, received the legal status of, a public street prior to that time;
 - b. The street corresponds in its location and lines with a street shown on a subdivision plat approved by the Planning Commission, or on a street plat made and adopted by the Planning Commission; or
 - c. (A) The lot fronts upon a permanent easement which conforms to all rules, regulations, and specifications applicable to the permanent easement of the Planning Commission or other department, division or agency of the county; provided, that such rules, regulations, and specifications governing permanent easements shall not take effect until such rules, regulations, and specifications are approved by the county legislative body in a resolution by a two-thirds (2/3) vote (T.C.A. §13-3-411 (a) --- (3)(A)).

(B) The permanent easement has access to an existing highway, street or

thoroughfare, or with a street located or accepted by the county legislative body after submission to the Planning Commission, and in the case of the Planning Commission's disapproval, by the favorable vote of the county legislative body required in T.C.A. §13-3-496.

4. The Planning Commission or other department, division or agency of a county as approved by the Planning Commission may recommend to the county legislative body regulations to govern a proposed permanent easement in a proposed subdivision, as defined in §13-3-401. The purpose of the regulations is to ensure that the county is not responsible for the future maintenance of such permanent easement (T.C.A. §13-3-411(b)).

B. Penalties

1. No county register shall receive, file, or record a plat of a subdivision within the planning region without the approval of the Planning Commission as required in T.C.A. §13-3-402.
2. T.C.A. §13-3-410 (a) provides that whoever, being the owner or agent of the owner of any land, transfers or sells or agrees to sell or negotiates to sell such land by reference to or exhibition of or by other use of a plat of subdivision of such land without having submitted a plat of such subdivision to the Planning Commission and obtained its approval as required by this part and before such plat is recorded in the office of the appropriate County Register, or who falsely represents to a prospective purchaser of real estate that roads or streets will be built or constructed by a county or other political subdivision, commits a Class C misdemeanor. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transaction from such penalties. The owner or agent of any land may sell, transfer or agree to sell any lot or lots shown on a plan having been given preliminary approval by the Planning Commission. The owner or agent shall post a performance surety in form and amount and with conditions and surety satisfactory to the Planning Commission, providing for and securing to the public the actual construction and installation of such improvements and utilities within a period specified by the Planning Commission and expressed in the surety. The county, through its county attorney or other official designated by the county legislative body, may enjoin such transfer or sale or agreement by action or injunction.
3. Any building or structure erected or to be erected in violation of the subdivision regulations shall be deemed an unlawful building or structure, and the Building Commissioner may bring action to enjoin such erection or cause it to be vacated or removed as provided in T.C.A. §13-3- 411.

4. The remedies and penalties provided by this chapter are to be applied exclusively to the owner or agent of the owner. Title to any tract conveyed without compliance with the provisions of this chapter is not affected by this chapter unless the sale or transfer has been enjoined by a court of competent jurisdiction prior to the conveyance being recorded in the office of the appropriate county register. While the title to any such tract is not affected by this chapter, the tract remains otherwise subject to all provisions of this chapter (T.C.A. §13-3-410 (b)).

Appendix A Certifications

CERTIFICATE OF OWNERSHIP

I (we) do hereby certify that I am (we are) the owner(s) of the property shown and described hereon, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and hereby dedicate all streets, alleys, walks, parks, and other open spaces to public or private use as noted.

| | |
|-------|-------|
| _____ | _____ |
| Date | Owner |
| _____ | _____ |
| Date | Owner |

CERTIFICATE OF ACCURACY

I hereby certify that the plan shown and described hereon is a true and correct survey to the accuracy required by the Rutherford County Tennessee Planning Commission and that the monuments have been placed as shown hereon, to the specifications of the County Road commissioner or the County Engineer.

| | |
|-------|----------|
| _____ | _____ |
| Date | Surveyor |

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the Subdivision Regulations for Rutherford County Tennessee, with the exception of such variances, if any, as noted in the minutes of the Planning Commission and that it has been approved for recording in the office of the County Registrar.

| | |
|-------|-------------------------------|
| _____ | _____ |
| Date | Planning Commission Secretary |

Appendix B Roadway Design Specifications

A. General

1. These standards and specifications should be considered minimum requirements. Design of streets shall follow the latest editions of the TDOT “Roadway Design Guidelines” and the AASHTO “A Policy on Geometric Design of Highways and Streets” unless otherwise noted. Also, other relevant TDOT, AASHTO, FHWA and ITE design documents should be consulted for guidance. The County Engineer shall make the final decision if any questions or conflicts arise between any of these standards.

TDOT’s “Roadway Design Guidelines” and Standard Drawings may be found online at: http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_design/design/Design_Resources.htm.

B. Functional Street Classifications

Classifications from the County Subdivision Regulations and the Long Range Transportation Plan shall be used for purposes of planning and/or designing new streets.

C. Private Streets and Planned Unit Developments (PUDs)

Private streets shall be designed and constructed to the same standards as required for public streets. The right-of-way and lane width requirements may be amended by approval as a PUD by the County Commission.

D. Right-of-Way

The minimum right-of-way widths for new streets shall be as shown in Table A. In some cases, right-of-way greater than that indicated in typical sections may be required. All street elements shall be placed within the right of way.

E. Street Cross Sections

The required number of lanes and widths are set forth in Table A. The cross sections shown are typical and should be used for most streets. Dimensions should be considered minimum values. However, the County Engineer may adjust the required cross section for a particular street.

Table A - Typical Street Cross Sections

| Street Classification | Description | Travel Lanes (feet) | Minimum Right-of-Way (feet) | Minimum * Sidewalk Width (feet) |
|-----------------------|-------------|----------------------------------|-----------------------------|---------------------------------|
| Arterial | Five Lanes | Five @ 12' | 100 | ADA Compliant |
| Collector | Three Lane | 2 @ 12' and 12' Center Turn Lane | 60 | ADA Compliant |
| | Two Lanes | Two @ 11' | 60 | ADA Compliant |
| Local | Two Lanes | Two @ 11' | 50 | ADA Compliant |

* Applies to streets with curb and gutter section

F. Easements

Easements for utilities and drainage shall be required. However, all street elements shall be located in the street right-of-way and not placed in easements. Any easement shall be of sufficient width to permit access for maintenance.

G. Design Criteria

1. Design Speed

All streets shall be designed in accordance with the minimum design speeds specified for each street classification as shown in Table B. The County Engineer must approve the selected design speed for new streets.

2. Maximum and Minimum Grades

The maximum grades for each classification of street are set forth in Table B. The minimum grade for streets with curb and gutter shall be one-half percent (0.5%), and the minimum grade for streets with roadside ditch shall be one percent (1.0%).

3. Design Traffic Volume

Traffic volumes are not usually a major factor in determining the geometric design criteria to be used in designing residential streets and subdivisions. However, the volume of traffic expected to use a street is important in determining the geometric design criteria for major streets such as arterial streets and some collector streets. Traffic volume and composition is also important in determining the required pavement thickness for a high volume or industrial street. New arterial and collector streets shall be designed to accommodate projected future traffic volumes. Typically, a design life of twenty (20) years from the anticipated completion date shall be used unless a different period is agreed to by the County Engineer. Projects that involve

isolated intersection improvements to the existing street network may use a five-year traffic horizon if allowed by the County Engineer.

4. Design Level of Service

Unless otherwise agreed by the County Engineer, projects will be designed to achieve a Level of Service (LOS) "C" or better. The County Engineer may approve other LOS designations.

Table B - Design Requirements

| Street Classification | Design Speed* (mph) | Maximum Street Grade* (%) | Minimum Street Grade (%) | |
|-----------------------|---------------------|---------------------------|--------------------------|------------------------|
| | | | Curb & Gutter Section | Roadside Ditch Section |
| Arterial | 45 | 7 | 0.5 | 1.0 |
| Collectors | 35 | 10 | 0.5 | 1.0 |
| Local | 30 | 12 | 0.5 | 1.0 |

* County Engineer has discretion to decrease design speed and/or increase maximum grade based on field conditions.

5. Horizontal and Vertical Alignment

Horizontal and vertical design parameters for each functional classification of streets are set forth in Tables C and D. Broken-back vertical curves and compound vertical curves should be avoided. For high speed arterial streets or for complex geometry, TDOT and AASHTO design standards and procedures shall be used.

Table C - Horizontal Geometry Requirements*

| Street Classification (design speed) | Horizontal Geometry |
|--------------------------------------|--|
| | Minimum Centerline Radius with normal crown (feet) |
| Arterial (45 mph) | 900 |
| Collector (35 mph) | 454 |
| Local (30 mph) | 300 |

* From "A Policy on Geometric Design of Highways and Streets" 2004 edition, AASHTO Exhibit 3-16. County Engineer has discretion to decrease design speed based on field conditions.

The minimum tangent distance between horizontal curves shall be one hundred (100) feet for local and collector streets and three hundred (300) for arterial streets.

6. Sight Distance

Vertical curves shall be designed to provide the minimum stopping sight distance required by the latest edition of "A Policy on Geometric Design of Highways and Streets." Current minimum values are shown in Table D. Where there are sight obstructions on the inside of curves the cross section elements or the alignment may need to be adjusted if removal of the obstruction is not possible to provide adequate sight distance. The County Engineer must approve any changes.

Table D - Stopping Sight Distance*

| Street Classification (design speed) | Crest | | Sag | |
|---|-----------------|--------------------------------|-----------------|--------------------------------|
| | Minimum K Value | Stopping Sight Distance (feet) | Minimum K Value | Stopping Sight Distance (feet) |
| Arterial (45 mph) | 61 (for 45 mph) | 360 | 79 | 360 |
| Collector (35 mph) | 29 (for 35 mph) | 250 | 49 | 250 |
| Local (30 mph) | 19 (for 30 mph) | 200 | 37 | 200 |

* From "A Policy on Geometric Design of Highways and Streets" 2004 edition, AASHTO Exhibits 3-72 and 3-75. County Engineer has discretion to decrease design speed based on field conditions.

H. Intersections

1. Intersection Angle

Streets shall be laid out so as to intersect as nearly as possible at right angles. The minimum angle of intersection shall be eighty-five degrees (85°) for all street types except local streets without approval of the County Engineer. In no case shall the angle of intersection be less than eighty degrees (80°).

2. Offset Intersections

Proposed new intersections along one side of an existing street shall be located, wherever possible, directly opposite the existing intersecting street. Offset intersections occur when two T-type intersections are located in relatively close proximity. Street jogs with centerline offsets of less than one hundred fifty (150) feet shall not be permitted along local or collector streets and centerline offsets of less than two hundred (200) feet shall not be permitted along an arterial street.

3. Intersection Radii

The minimum curb radius of any street intersection shall be thirty (30) feet. The complete minimum radius requirements are listed in Table E. The radii shown are minimums and a larger radius may be required.

Table E – Minimum Intersecting Street Radii*

| Street Classification | Intersecting with | | |
|-----------------------|--------------------|---------------------|------------------------|
| | Arterial (feet) | Collector (feet) | Local Street (feet) |
| Arterial | 50 | 50 | 30 |
| Collector | 50 | 30 | 30 |
| Local Street | 30 | 30 | 30 |

* These values are minimum; larger radii may be required to accommodate design vehicle.

I. Emergency Access and Access for Service Vehicles

All new streets and intersections shall accommodate safe and efficient movement of emergency vehicles and service vehicles (school buses, solid waste trucks, etc.). Turning templates shall be used to verify that these vehicles will be adequately accommodated.

J. Street Elements

1. Pavement Type

Streets are to be designed with asphaltic concrete pavement on compacted subgrade. Pavement thickness shall be as shown in the Standard Drawings unless otherwise required. The dimensions shown for each street classification are based on assumed subgrade support and traffic loadings. The County Engineer may require additional thickness or require a detailed pavement design be performed based on a soil condition analysis and projected traffic loadings.

2. Curbs and Gutters

All new streets shall be designed with roadside ditches unless applicant desires to use curbs and gutters. If the applicant chooses, the standard curbs to be used on new streets are as follows:

- Four (4) inch Rollover Curb and Gutter (Four (4) inch mountable curb with twelve (12) inch gutter pan) – to be used on all local streets and all collector streets with

residential driveways. This is considered a mountable curb (see detail).

- 6-30 Curb and Gutter (six (6) inch curb – thirty (30) inch wide with twenty-four (24) inch gutter pan) – to be used on all arterial streets. This is a vertical and non-mountable curb (see detail).

3. Sidewalks and Ramps

Sidewalks are not required in any residential development but may be installed at the developer's discretion. Individual lot owners or a Home Owners Association (HOA) shall be responsible for sidewalk maintenance regardless if the sidewalk is located inside or outside of the public right-of-way. The County will not be responsible for sidewalk maintenance.

If sidewalks are to be installed, they shall be shown on the Construction Drawings and the minimum width shall be five (5) feet. All pedestrian facilities provided within a County street right-of-way shall be designed in accordance with the American with Disabilities Act (ADA) Accessibility Guidelines. In all cases, new sidewalks shall provide a minimum clear width of five (5) feet. Clear width is the width of the unobstructed travel way along a sidewalk.

Ramps meeting requirements of the ADA Accessibility Guidelines shall be installed at all intersections where sidewalks are installed.

A minimum four (4) foot wide grass strip is to be used between sidewalks and the back of curb, detail to be provided in Construction Drawings.

4. Sidewalk Encroachments and Obstructions

Encroachments such as utility poles, fire hydrants, utility boxes, parking meters, mailboxes, sign posts, signal poles and street furniture shall not be located within the concrete portion of any new sidewalk, unless approved by the County Engineer. Sidewalks shall be inspected by the County Engineer for obstructions before any concrete is poured. Tree grates, utility covers and manholes may be permitted within a sidewalk provided five (5) feet of unobstructed clearance is provided on one side.

5. Culverts

Driveway culverts are to be sized per design criteria set forth in Article III Section H. Stormwater Design. Minimum driveway culvert shall be fifteen (15) inches diameter. The culvert material shall be RCP, CMP or other material that is acceptable to the County Engineer; however, culvert material shall not be plastic.

6. Cul-de-Sac

All drainage systems shall be designed that when the receiving stream is at the 100-year storm event level, the storm sewer will continue to drain the areas they are designed to serve.

K. Signs

The Developer shall furnish and install all roadway signs and traffic signs to comply with current Manual on Uniform Traffic Control Devices (MUTCD), published by the U.S. Department of Transportation, Federal Highway Administration. All signs shall be installed before building permits can be released. These shall include: warning, regulation, the direction of traffic and the proper labeling of streets.

Street name signs shall be placed at every intersection. All street name signs must be on 9" blue 0.80-0.100 aluminum blanks with white retroreflective letters. Street names shall be displayed using upper and lower case letters with upper case letters being 6" tall and lower case being 4.5" tall or current MUTCD standard. Signs shall be ten (10) feet from the ground surface.

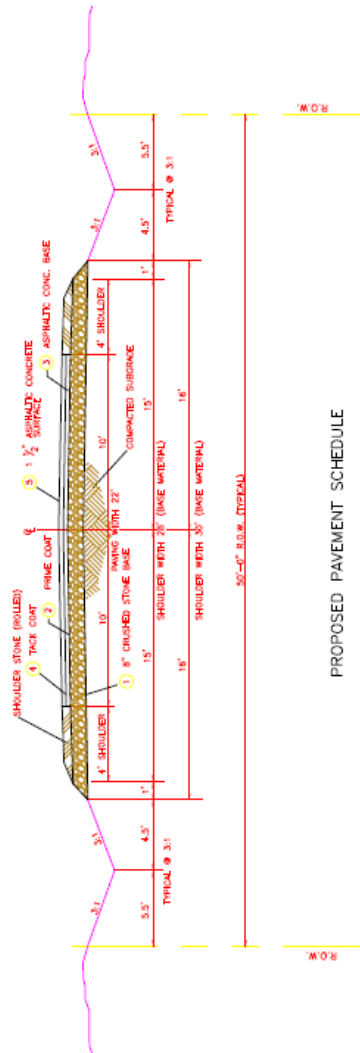
Any street name sign that is at the intersection of a multi-lane highway with a speed limit greater than 40 mph shall use 8" upper case and 6" lower case letters on an appropriately sized sign blank.

All stop signs shall be a minimum of 30" unless the street intersects a multi-lane highway in which case it shall be 36". All stop signs must have a minimum retroreflectivity level of Type III prismatic sheeting, as shown in Table 2A-3 (MUTCD).

Traffic, warning, and regulations signs shall be placed as required at all appropriate intersections or on the roadside. The size and placement of all traffic signs shall conform to the requirements of the MUTCD.

Ornamental Street signage, voluntarily utilized by the developer, shall be maintained by HOA in perpetuity.

c:\08-420\8945\roadway_section\shelton.dwg



PROPOSED PAVEMENT SCHEDULE

| | |
|----|--|
| 1. | 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY GRADING D PUG MILL MIX |
| 2. | PRIME COAT (AT COUNTY ENGINEER'S DISCRETION) (402) 0.30 GAL/S.Y. |
| 3. | 2.5" ASPHALTIC CONCRETE BASE (307-B MOORIED) |
| 4. | TACK COAT (AT COUNTY ENGINEER'S DISCRETION) (403) 0.10 GAL/S.Y. |
| 5. | 1.5" ASPHALTIC CONCRETE SURFACE (411-E) |

DATE March 18, 2011

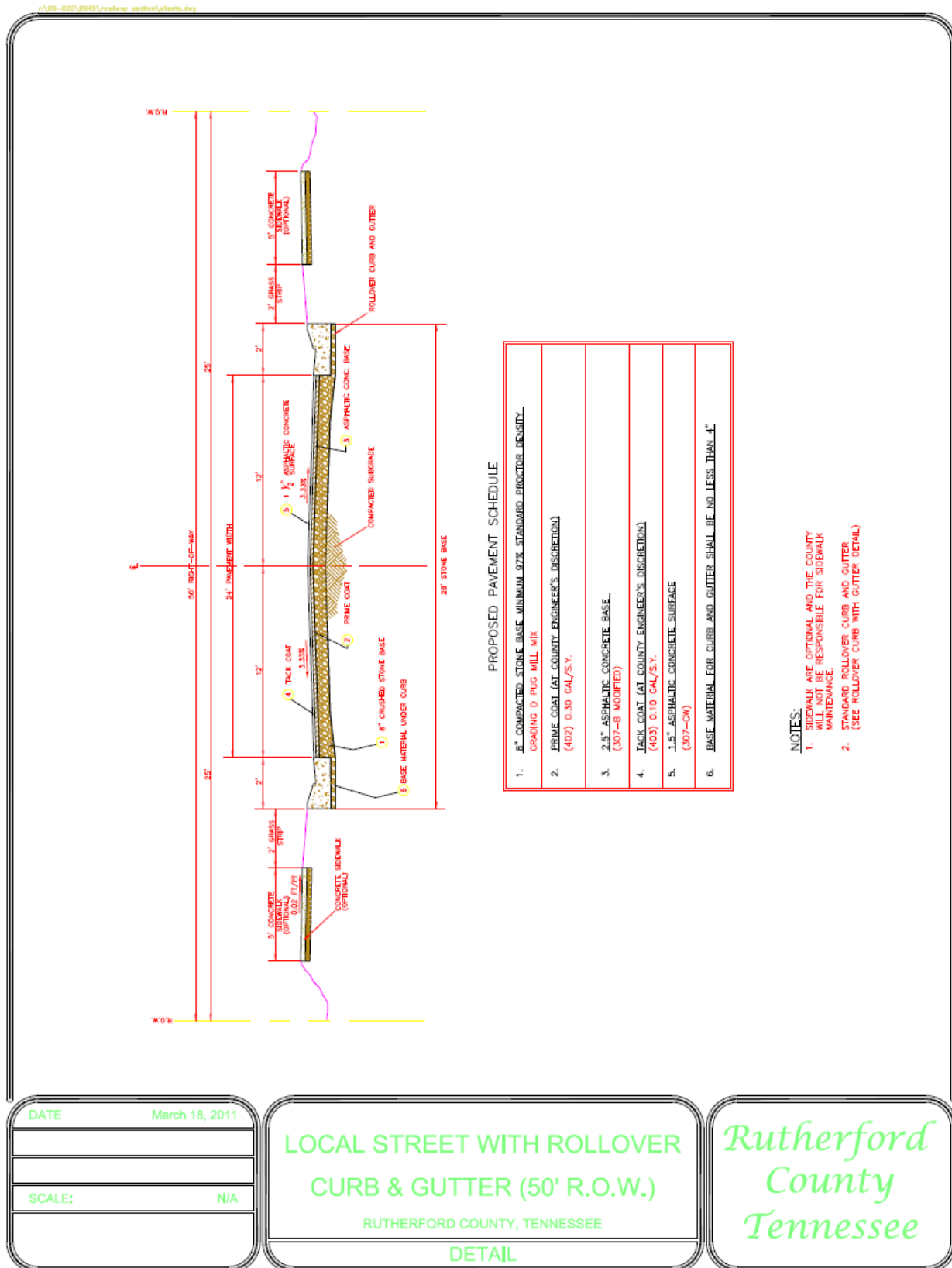
SCALE: N/A

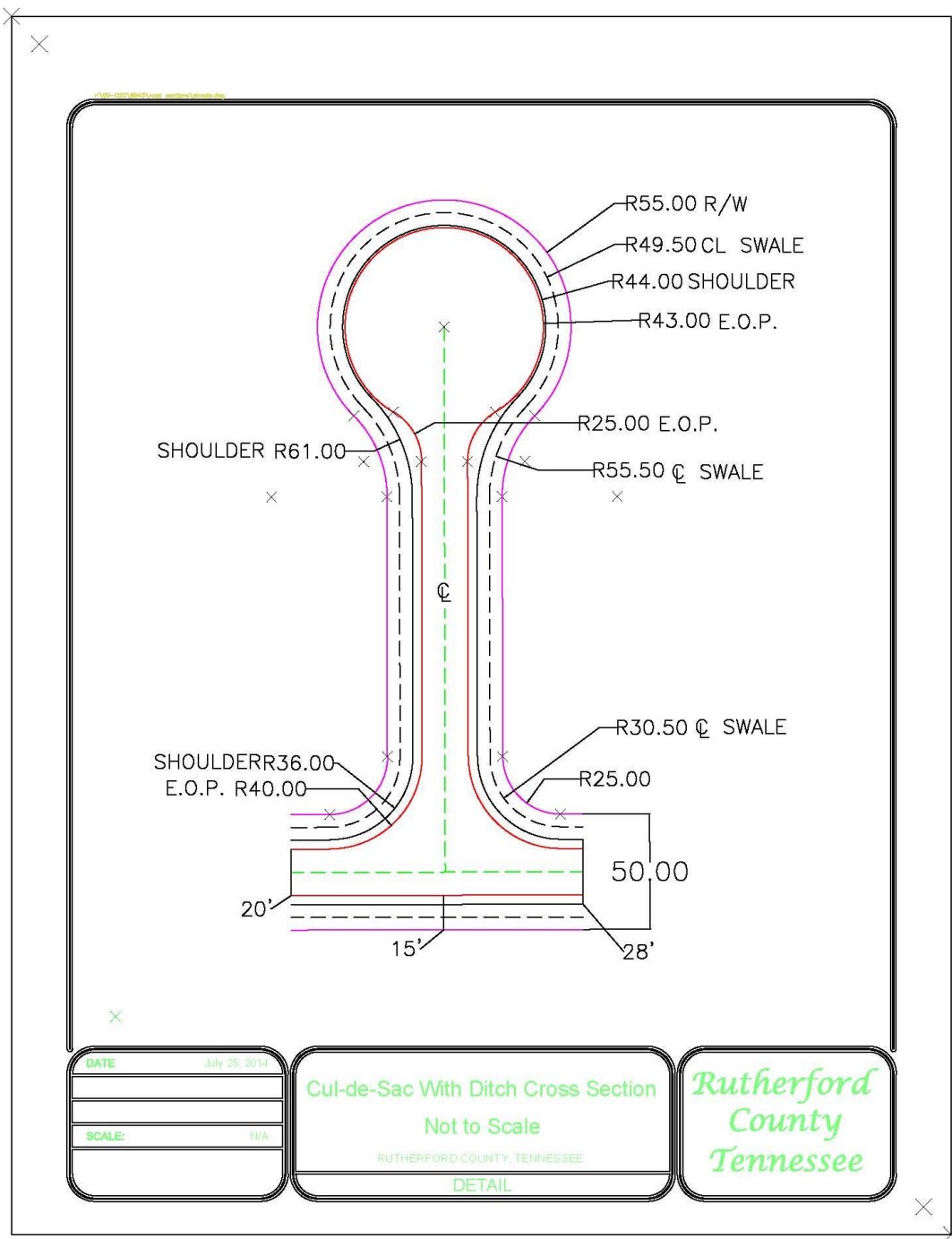
LOCAL STREET WITH
DITCH SECTION (50' R.O.W.)

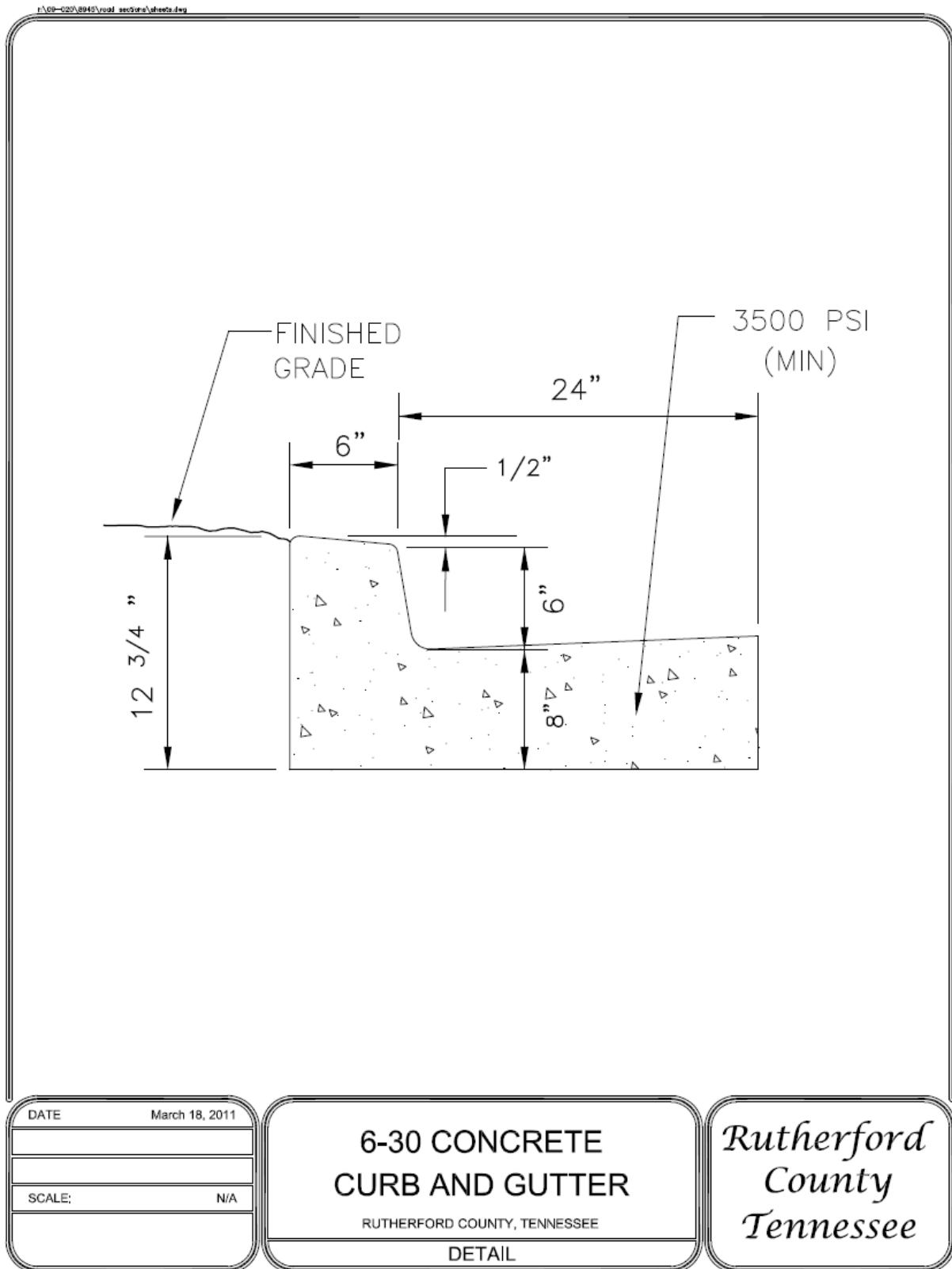
RUTHERFORD COUNTY, TENNESSEE

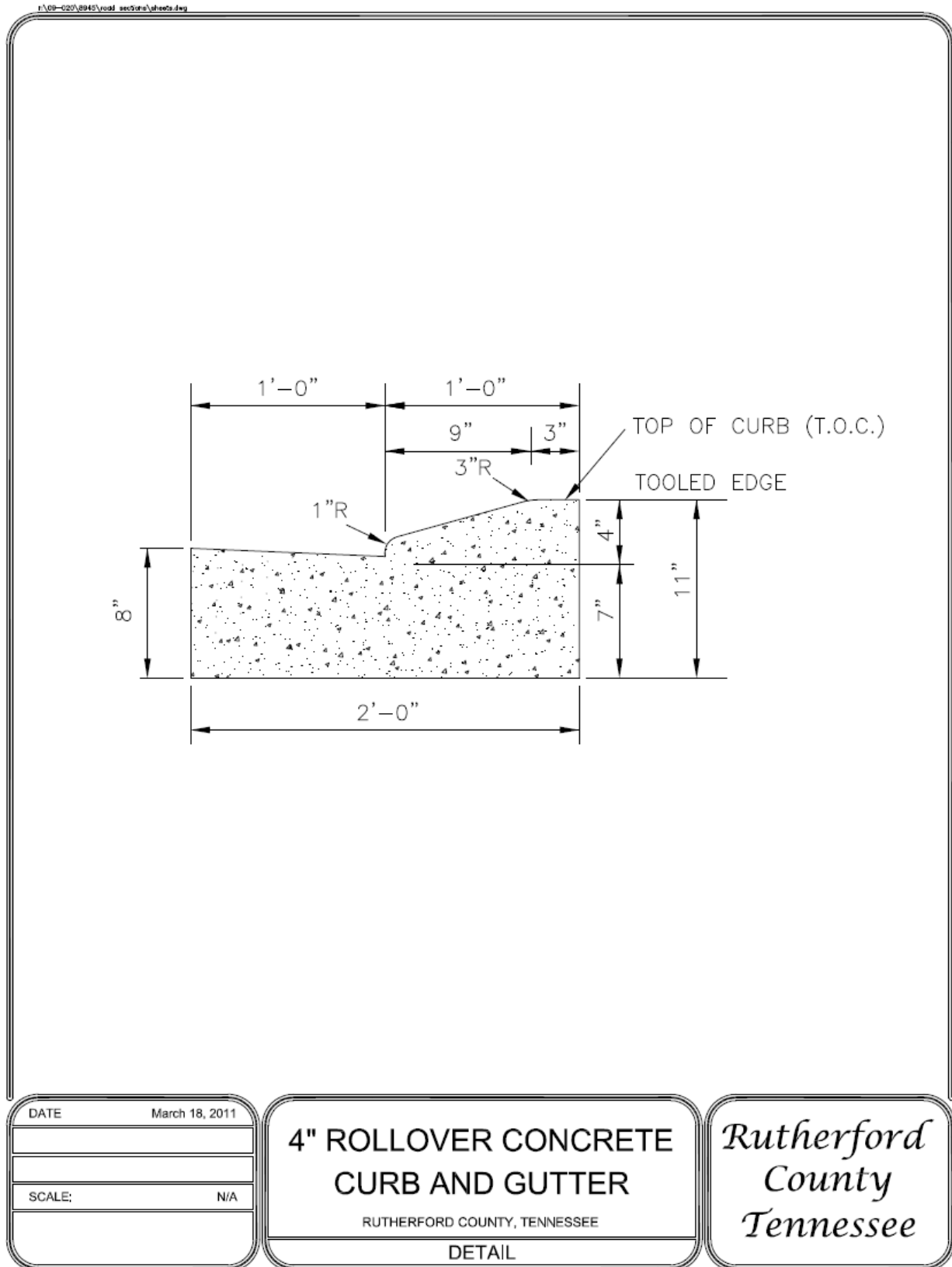
DETAIL

Rutherford
County
Tennessee









Appendix C Definitions and Abbreviations

Rules for Construction of Language.

In the construction of these subdivision regulations, the rules contained in this Appendix shall be observed and applied, except when the context clearly indicates otherwise:

- (a) The particular shall control the general.
- (b) The word “shall” is always mandatory.
- (c) The word “may” is permissive.
- (d) The word “lot” shall include the words “piece” or “parcel”.
- (e) The word “structure” includes all other structures, or parts thereof, of every kind regardless of similarity to buildings; and the phrase “used for” shall include the phrases “arranged for”, “designed for”, “intended for”, “maintained for”, and “occupied for”.
- (f) In the case of any difference of meaning or implication between the text of these Subdivision Regulations and any caption, illustration or table the text shall control.
- (g) Words used in the present tense shall include the future, and words used in the singular include the plural, and the plural the singular, unless the context clearly indicates the contrary.
- (h) Unless the context clearly indicates to the contrary, conjunctions shall be interpreted as follows:
 - (1) “And” indicates that all connected items, conditions, provisions or events shall apply.
 - (2) “Or” indicates that one or more of the connected items, conditions, provisions, or events shall apply.
 - (3) “Either or” indicates that the connected items, conditions, provisions or events shall apply single but not in combination.
- (i) All public officials, bodies, and agencies to which reference is made are those of Rutherford County, Tennessee.
- (j) The title “Planning Director” shall refer to the Planning Director or an authorized representative.
- (k) The title “County Engineer” shall refer to the County Engineer or an authorized representative.

DEFINITIONS

Except where definitions are specifically included in various sections of these Subdivision Regulations, words in the text or tables shall be interpreted in accordance with the provisions set forth in this section. Where words have not been defined, the standard dictionary definition shall prevail.

| | |
|---------------------------------------|---|
| AASHTO | Abbreviation for “American Association of State Highway and Transportation Officials” |
| Arterial Road or Street | A road so designated on the Rutherford County Long Range Transportation Plan. |
| Basement | That portion of a building having its floor subgrade (below ground level) on all sides. |
| Collector Road or Street | A road so designated on the Rutherford County Long Range Transportation Plan. |
| Comprehensive Plan | The currently adopted Comprehensive Plan for Rutherford County. |
| CMP | Abbreviation for “Corrugated Metal Pipe” |
| Consolidated Plat | A drawing showing the combination of any number of existing lots or record into an equal or lesser number of lots, as described in Article II.J.1. |
| Developer | The legal or beneficial owner or owners of a lot or of any land included in a proposed development including the holder of an option or contract to purchase, or other persons having enforceable proprietary interests in such land. |
| Easement | The right to utilize a designated portion of a parcel of land for limited and specific purposes including, but not limited to, access, utilities and drainage. |
| FEMA | Abbreviation for “Federal Emergency Management Agency” |
| FIRM | Abbreviation for “Flood Insurance Rate Map” |
| FHWA | Abbreviation for “Federal Highway Administration” |
| GIS | Abbreviation for “Geographic Information Systems” |
| ITE | Abbreviation for “Institute of Transportation Engineers” |
| Long Range Transportation Plan (LRTP) | The currently adopted Long Range Transportation Plan for Rutherford County. |
| LOS | Abbreviation for “Level of Service”. A measure used by traffic engineers to analyze highways by categorizing traffic flow with corresponding safe driving conditions, typically shown by letter designation A through F. |

| | |
|---|--|
| Minor Road or Street | A road so designated on the Rutherford County Long Range Transportation Plan. Sometimes referred to as local roads or streets. |
| RCP | Abbreviation for “Reinforced Concrete Pipe”. |
| Right-of-way (ROW) | A strip of land acquired by reservation, dedication, forced dedication, prescription of condemnation and intended to be occupied by a road, communication, crosswalk, railroad, electric transmission lines, oil or gas pipeline, water line, sanitary sewer main, storm sewer and similar uses. |
| Recording Information | The date, location (plat book, record book, etc.) and any other pertinent information regarding the recording of a document. |
| Septic Tank Effluent Pump (STEP) System | An alternative sanitary sewer disposal system. |
| Stormwater Management Ordinance | The currently adopted Stormwater Management Ordinance for Rutherford County. |
| TDOT | Abbreviation for “Tennessee Department of Transportation” |